

# FOLIO

THE UNIVERSITY OF ALBERTA STAFF BULLETIN

EDMONTON 7, ALBERTA

MARCH 21, 1969



## *Development plan unveiled for main campus*

A comprehensive development plan for the main campus was presented at a special meeting of the Board of Governors Building Committee, March 18, 1969. Highlights of the plan are set out in the following pages, and readers of FOLIO are invited to comment. The plan was prepared by A. J. Diamond and Barton Myers, Architects and Planners, of Toronto. Messrs. Diamond and Myers have participated in many similar large-scale projects, and both teach architecture at the University of Toronto.

The initial reaction of persons attending the meeting was that the

proposals were enlightened and exciting. The task now facing those responsible for University planning is a refinement of the proposals in the light of the University's goals, and the funds it may have available.

Mr. Diamond's study of the present main campus led him to conclude that many aspects of it were very well planned, but integrating them into a campus that would accommodate 30,000 students presented "a challenge." He was surprised to read in one of Canada's great newspapers that he was "appalled" by "the mess" he was said to have found here.

## THE REPORT

*Excerpts from the report presented by A. J. Diamond and Barton Myers follow:*

This report is not the final Long Range Development Plan report—it is merely an outline of the principles of the long range plan. Appended are the goals and objectives on which the planning is based: these may more properly be termed assumptions, as they will, and should be, refined and even changed over time. It is hoped that their inclusion will focus attention upon them, in order to elicit considered responses.

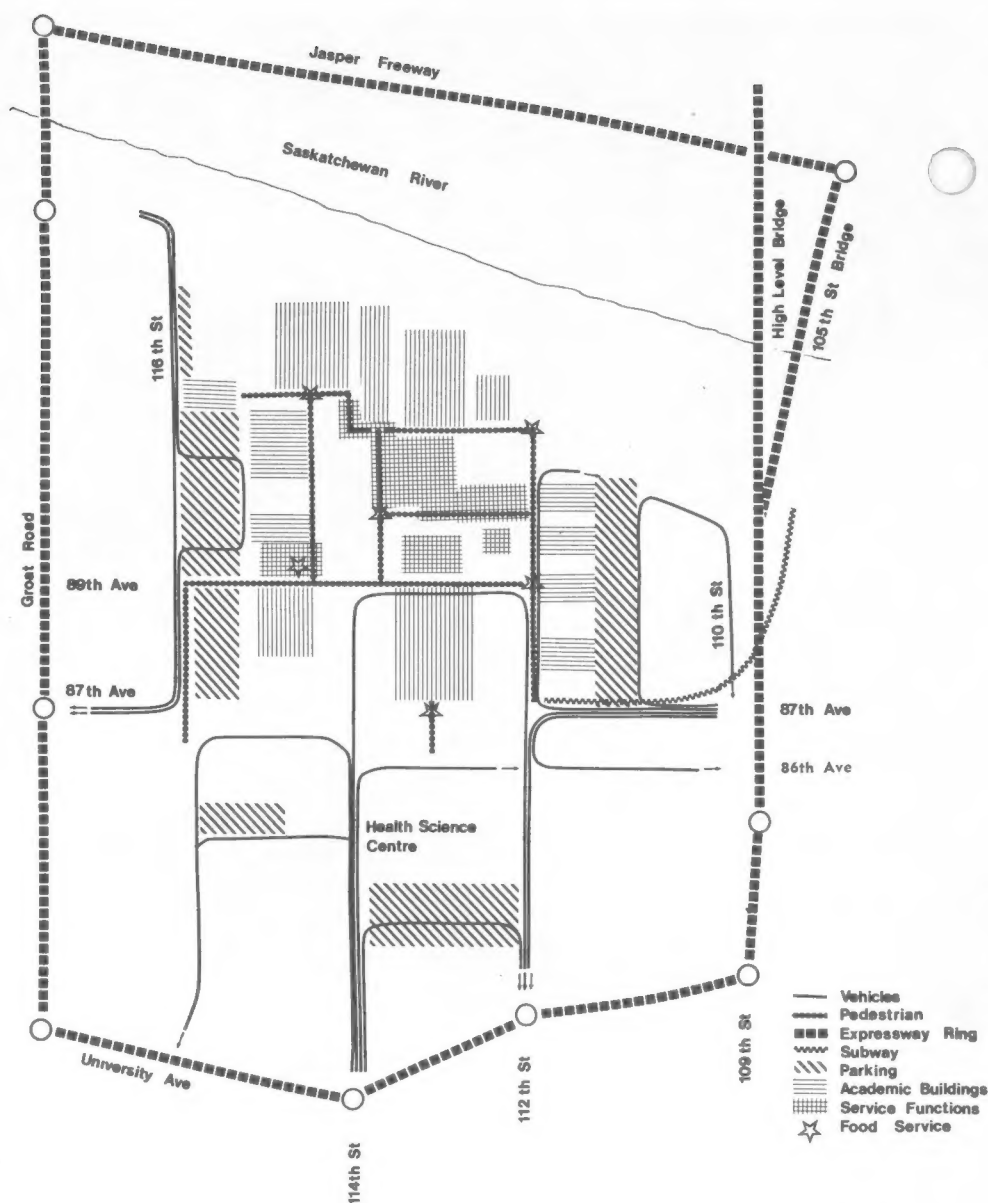
It must also be understood that the North Garneau campus is only included where there are issues which affect the main campus or where a planning principle may be applicable. No extensive planning by us at this time for this area has been attempted.

A distinction between the conventional master plan and long range planning should be explained, although this may be well understood: the long range plan does not delineate designs for individual projects. The demands and needs of all projects are not known, and will only be revealed on detailed studies. Individual project architects will not wish to be limited by fixed design notions which would inevitably produce constraints on innovation. The long range plan sets down principles for the campus as a whole—for example, movement and linkage systems, preferred academic and non-academic loci—and suggests methods of utilizing the capital budget to the benefit of the campus as a whole as well as projects in particular. Ways of creating a vital university community are also described. It is thus intended that the long range plan become a working document of the Campus Development Office—a dynamic plan which is capable of accepting growth and change without destroying principles.

It should be emphasized that this is a long range plan, extending over at least a ten year period. It is not a plan for an immediate

## SUGGESTIONS INVITED

The Campus Development Committee has invited comments or reactions from faculty and staff about the proposed Long Range Development Plan for the main campus. These should be submitted through the appropriate Dean or Director in consolidated form to the Secretary of the Committee, E. R. Shedden, Room 312, University Hall, by 12 noon, Friday, March 28.



*The planners recommend that no traffic arteries cut the University district. An expressway ring is shown in this schematic diagram. Parking is provided on the University's periphery, access roads (for vehicles dropping passengers) loop into the campus, and pedestrian concourses connect the approaches with major buildings.*

housekeeping operation, although we hope that all projects will be directed towards implementing the long range objectives.

While the time given for the formation of the long range plan was extremely short, our task was made a great deal easier by the tremendous co-operation we have received from the Campus Development Office; W. H. WORTH has been of inestimable help; RICHARD WILKIN, our contact man, WALTER HILLER and ALAN ROBERTSON made things as smooth as possible. The enthusiasm and interest of faculty, students, and the Board Building Committee under the Chairmanship of R. K. BANISTER, has been more than encouraging.

## PLANNING PROCESS

A critical path was used to guide the planners in their task. It set out the particular

planning process undertaken. Perhaps it is of interest to note that the work had to be accomplished in a total of 94 working days.

It should be noted that the long range development plan lies well along the path of the comprehensive university planning process; it should also be clear that the physical environment cannot be planned without regard to the goals, objectives, and policies of the university.

The importance of Institutional Research, as an aid to evaluating policies and examining means of implementing the plan, cannot be over emphasized. In order for the executive levels of the University to make decisions based on alternatives which have been studied, Institutional Research should be used as a vital staff function.

The critical path diagram showed that one of the first tasks was the identification of

University policies in a number of areas. Some of these are implicit in the operation of the University, some are explicit, and others required formulation. The analysis of previous consultants' work was also required before proceeding to the formation of the plan.

#### GOALS AND OBJECTIVES

In the absence of articulated goals, the planners prepared two documents on which to base their planning. The first, *Institutional Goals and Objectives*, is substantially that of the findings of the task force on goals and objectives at Temple University in Philadelphia. The second, *Planning Goals and Objectives*, was formed after consultations with many members of the faculty and staff, and a few of the student body, of The University of Alberta, analyses of previous work done by consultants to the University, and the contribution of consultants to the long range planners.

The findings of the task force on goals and objectives at Temple University, have been used as a means of focussing attention on the issues now facing urban universities. While the situation at Temple, in Philadelphia, cannot be held to be entirely comparable to that of The University of Alberta, in Edmonton, there are, broadly speaking, sufficient relevant issues in principle.

The Planning Goals and Objectives have similarly been set down in order first, to define tentatively the posture the University wishes to assume and to give direction to planning, and second, to use these articulated goals as a basis for further examination and allow further planning refinements.

While the goals and objectives are appended to this report, the following are summarized and listed as perhaps being salient:

1. Buildings will no longer be built without regard to the possible ways in which they can contribute to the overall campus plan.
2. A mix of uses is accepted—for example, housing will not be relegated to a "suburban" or peripheral location, but will be in the heart of the campus.
3. Wherever possible, climate-controlled access ways will be incorporated into building programs. In this way they need not, with careful forethought, cost any more than the set building budget.
4. Access ways, or pedestrian streets, will incorporate other general requirements—food services, sitting space, locker rooms, or commercial-type facilities.
5. The University will provide housing for all who desire it, and a choice in location, types, and operation will be provided.
6. Because the University sees itself as an

institution of community benefit as well as an academic institution, access by the public to appropriate activities will be encouraged.

#### INVENTORY

The inventory was made graphically, in order to assess readily existing conditions, measure projected space needs, determine the required locus of academic departments, and analyze movement problems and utility and service needs.

In essence, the inventory demonstrates an under-utilization of expensive land (less than 15 per cent coverage); unnecessarily complex and long service paths; unnecessary automobile penetration; a series of isolated, and often poorly related buildings in both the academic and physical sense; and poorly used open space.

#### THE LONG RANGE PLAN

In order to describe briefly the main organizational system of the campus plan, reference should be made to the diagram on page two.

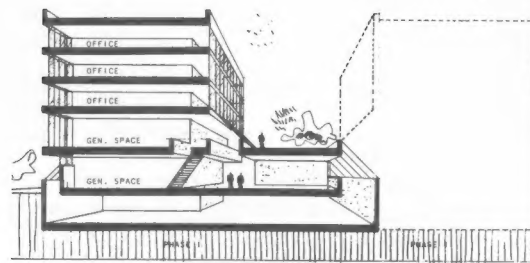
While all encouragement is given to the use of public transportation systems, it is recognized that the University will be served primarily by the automobile. In fact, a campus of 30,000 students can expect to accommodate a total of 12,000 to 15,000 automobiles.

The use of public transportation is effected by bringing buses alongside a pedestrian street on 89 Avenue, and by linking the mass rail transit stop to the campus heart via a pedestrian street.

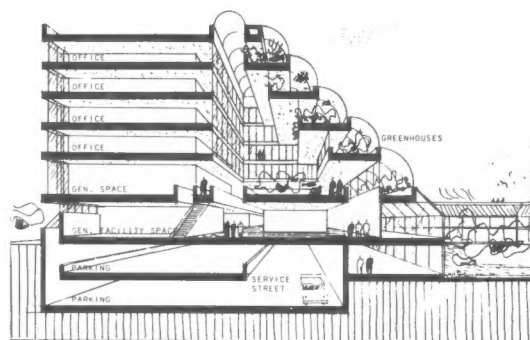
The intention is both to serve the campus well with private automobiles and bus, and prevent undue penetration into the campus of vehicular traffic. Where such penetration does occur, grade separations between pedestrian and vehicles are made in heavily travelled areas, and horizontal separations are made in lightly travelled areas.

This is achieved by distributing the major parking structures on the western and eastern approaches to the campus, thereby docking cars before they get to the heart of the campus. Where grade separations are required, this is achieved by building over roadways. Thus, above-grade pedestrian easements are incorporated into buildings which must, in any event, be constructed.

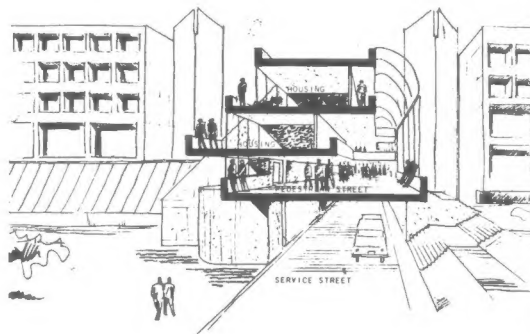
New buildings are located both to satisfy required academic linkages and create climate-controlled access ways. General use and major teaching spaces are located on these access ways. This makes the general teaching spaces accessible to many. The distribution of widely used spaces on access ways, with more private or particular spaces removed from the main circulation paths,



*New buildings should form links in a street system that separates motor and pedestrian traffic. General rooms are located near the heated concourse; more private space is upstairs.*



*Above, greenhouses form a galleria over the street, integrating street and academic buildings. Below, housing is integrated rather than confined to the periphery. Sketches show typical examples only, not firm plans.*



*The Students' Union Building is an example of the "street" concept: large corridors provide for traffic, sitting space, displays. Adjacent public rooms have glass walls; private offices are upstairs.*





Mr. Diamond, Dr. Johns,  
and Mr. Myers

creates a potential flexibility for the academic system—the grouping of disciplines as well as an organization by faculties is made possible.

The physical links provide the appropriate housing of other facilities—food and commercial type services, sitting space, display areas, meeting places and even study space. The links are thus multipurpose in nature: they achieve connections between academic areas, give access to major teaching and library spaces, and provide much needed general service space. Not the least advantage is the social benefit to be derived by the provision of such forms of space: *again, with careful preplanning, resourceful use may be made of capital expenditure.*

The plan recognizes that housing is an important factor in creating a vital urban campus. The location of housing is more often than not in accordance with the “labor” notion: students leave their place of residence in the morning, journey to work and return in the evening, much as a suburban commuter does; work place and home are distinct and separate.

The concept of a university community can be given realization by providing as many activities and facilities in mixed development on the campus as possible. Rather than the question of what housing can do to improve the academic efficiency of the student, the question of how housing could increase the richness of the campus life should be posed.

Paradoxically, housing which is richly endowed with recreational facilities, may, in the larger sense of the university as a whole, stifle inter-student contacts, separating resident and non-resident student. Support facilities, such as dining or recreation, may be effectively used as links between resident and non-resident, undergraduate and graduate, and even faculty and student. These may be logically located above or with the pedestrian street system. In addition, the mix of academic space and housing units, to make a larger scale college, should be considered.

Beyond the satisfactions to be gained on the main campus proper, suggestions have been made respecting adjacent land use. One is a way in which the University, the city, and the province might collaborate to their mutual benefit: the area around the Northern Alberta Jubilee Auditorium is a logical place, because of the accessibility of this location for convention, sports, and exhibition facilities. Another is the way in which links to the community can be effected via the mass rail transit stop: the inevitably intense commercial development around a major transportation terminal



can be used as a functional and physical bridge. Further, we suggest that Corbett Hall, next to the proposed University stadium, become an alumni centre.

The diagram on page two shows the essential structure of the plan—the ultimate traffic flows which reach destinations before the campus heart; the pedestrian movement links to which academic departments are attached and from which they grow; and the main concentration of academic service functions at the centre. The diagram also demonstrates how an orderly progression from parking structure, through pedestrian streets, to any desired destination is accomplished.

While the long range plan suggests a movement system which will benefit both the University and the city, the University's movement system is not dependent on the city's improvement program.

#### IMPLEMENTATION

In conclusion, an outline of the future steps to be taken for the implementation of the plan are given in point form:

1. The utilization of Institutional Research as a valuable staff function to assess needs, test programs, and evaluate alternate means.
2. The refinement and further articulation of academic and institutional goals.
3. The co-ordination, with the city, of traffic movement, in order that the city may make adequate provision of capital budget for the necessary upgrading of intersections and roads as they affect the University.
4. The formation of detail briefs for project architects and engineers, in order that the ground rules be made explicit and performance criteria be established.
5. The undertaking of cost and feasibility studies for the overall academic and building program.
6. The undertaking of housing studies to determine the need and demand for the

various forms of possible housing.

7. The finding of means to implement the established policy on campus planning and development, which states that the quality of physical environment is held to be important; the appointment of outstanding architects and engineers costs no more and is the best way to realize this policy.

#### TERMS OF REFERENCE OF THE PLANNERS FOR THE MAIN CAMPUS

(The following is an excerpt from the agreement between The University of Alberta and A. J. Diamond and Barton Myers)

The Plan shall be defined as an assembly of approved material submitted in a manner satisfactory to the University and consisting of:

- A. A written statement of the problem, based upon a review of existing conditions and information, and the principles of organization and procedures to be employed in its solution to establish a basis for the future development of the area.
- B. Sufficient site drawings to illustrate the problem and its solution.
- C. A proposed land use plan indicating existing buildings, buildings to be demolished, and proposed new buildings, giving special attention to the siting and principles of development of additional facilities for Chemistry, Education, Engineering, parking structures, the physical sciences, and major support facilities.
- D. Recommendations with respect to the long-term use of existing buildings or facilities for which a change in function may be warranted, giving special attention to the Agriculture-Biological Sciences Building, Arts Building, Civil and Electrical Engineering Building, Medical Sciences Building, Athabasca Hall, Assiniboia Hall, Pembina Hall, and the South Laboratory.
- E. Recommendations on pedestrian and vehicular circulation patterns.
- F. Principles of site development which will establish criteria for future growth including, but not limited to
  1. pedestrian and vehicular movement systems in relation to items (C), (D), and (E) above;
  2. furniture, lighting, graphics, and the like;
  3. outdoor recreational facilities, surface parking areas, and the like.
- G. Recommendations as to the location of rights of way for major services.
- H. Suggestions with respect to the phased implementation of the Plan based upon information to be provided by the University.

## PLANNING GOALS AND OBJECTIVES

### Planning goals

#### TRAFFIC, PEDESTRIAN

To provide climate controlled access between major pedestrian generators.

To use building corridors as general circulation only where designed access ways are not available.

To separate vehicular and pedestrian movement

To make all lecture rooms accessible without providing mechanical means of vertical circulation.

#### PUBLIC TRANSIT

To encourage use of public transit as access mode to campus

#### PRIVATE AUTOMOBILE

To minimize through traffic through the campus.

To make access to all sectors of the campus convenient to university bound traffic.

(Which buildings require direct, individual access?)

#### PARKING

To accommodate as many autos as require parking.  
To minimize distance between parking and building destination.  
To provide climate-controlled connections between parking and destination.  
To minimize penetration of autos into campus.

#### INTERNAL CIRCULATION

To service every building efficiently.

#### ATHLETICS AND RECREATION

To provide facilities appropriate to the size and climatic environment of the University.

### Planning objectives

Access ways to be incorporated in new building.  
Building configuration and location to accommodate such movement.  
Access ways to have at least one side exposed to exterior, or to be well lit with natural light.  
Access ways to incorporate other facilities—food, study, commercial, sitting, exhibition, lockers.  
Access ways to provide access to major spaces.

Horizontal separation in low volume areas, vertical separation at high volume areas.

All lecture rooms and major public gathering places to be located not more than three floors above or below main pedestrian level.

Bus stops to be located for effective distribution to major campus population areas, thereby eliminating the need for a separate university feeder bus.  
All bus routings to serve rapid transit station.  
To upgrade roads in and around campus for improved bus service.  
University to support the E.T.S. proposal for mass rail transit stop at 112 Street and 87 Avenue.  
Station and the proposal to effect underground mezzanine connections to south and north sides of 87 Avenue.  
To use air rights over mass rail transit.

To recognize 87 Avenue as university feeder.

To encourage improvement of 82 Avenue as by-pass.

To reduce the use, by all traffic, of Saskatchewan Drive.

To encourage the city to phase its roads improvement program in order to prevent through traffic flows from entering campus.

To locate private auto and cab drop-offs at common collector points.  
To encourage climate-controlled connections from collector points to individual buildings.

Utilization of parking structures for all parking because of high land costs.

Parking located on perimeter.

Parking must be financially self-supporting.

Each building to have direct service and emergency vehicle access.  
Services to be scheduled to prevent servicing at peak traffic and pedestrian movement times.

Intramural facilities to be associated with housing.  
Extramural facilities to be combined with other institutions.  
Proximity of Physical Education teaching facilities to be maintained.  
Facilities for life-time sports to be developed.  
Facilities to be used to effect social links and a sense of university community.  
Intercollegiate sports for players and spectators to be located for easy access from campus.  
The erection of a field house for athletics, convention, and convocation use to be considered.

### Planning goals

#### HOUSING

To create a university community.

To provide housing for all who desire it.

To provide a variety of housing forms—physical, locational and operational.

#### ACADEMIC LINKAGES

To facilitate good connections between functionally interdependent departments.  
To provide a Physical Plant capable of accepting faculties or disciplines.

#### COMMUNITY LINKAGES

To contribute to the life of the community.

To avoid conflicts with the community in development of the campus.

To eliminate hard and fast boundaries between the University and the community where possible (refer to Progress Report No. 3).

#### SERVICE AND STORAGE

To create an efficient plant for the operation of the maintenance, physical plant, food preparation, and warehousing departments.

#### FOOD SERVICES

To meet the demand for meals of the entire university community.

To provide a variety in location, type, and size of food facility.

To use food facilities to achieve a mix of resident and non-resident.

To provide a centrally located facility for storage, service and preparation.  
To distribute food services to service the entire campus.

#### UTILITIES

To provide an efficient distribution of utilities to all parts of the campus.

#### LIBRARIES

To locate those faculties which will not have their own departmental libraries as close as possible to the appropriate central library, with climate-controlled linkage.

To form a "library core" linking all the existing and proposed major library facilities.

#### COMMERCIAL

To allow commercial-type facilities to operate on campus.

### Planning objectives

To use housing as linkage.

To provide housing on campus.

To use support facilities as social links between resident and non-resident.

To combine, where appropriate, housing with other university functions.

To examine alternate forms of linkage—eg. faculties or disciplines.

To provide climate-controlled links between major pedestrian generators.

To use connectors as access to support and general academic teaching space.

To evaluate technological teaching aids.  
To locate academic service facilities as close as possible to academic base.

To allow the use of appropriate university facilities by the community.  
To encourage joint cultural programs with the community.  
To seek ways in which the development of community facilities may be assisted by the university.

To locate services and storage as close to the campus as possible, without using high priority land.

To reduce the amount of heavy trucking on campus.

To give close proximity to all service departments.

To provide meals for 60 per cent of the university community at each mealtime.

To consider food service by concession to supplement university facilities.

To locate food facilities for housing adjacent to the "public street" where appropriate.

To locate the central food preparation area with the central storage areas adjacent to but off the central campus.

To locate a major food facility, consisting of both cafeteria and snack bar facilities, in each teaching zone of the campus.

To locate a serviced lunchroom for students, faculty, and staff in adjacent major building in the pedestrian street system.

To locate vending services, including table and seating areas, at frequent intervals in the pedestrian street system.

To extend the present service tunnel to all areas of the campus.

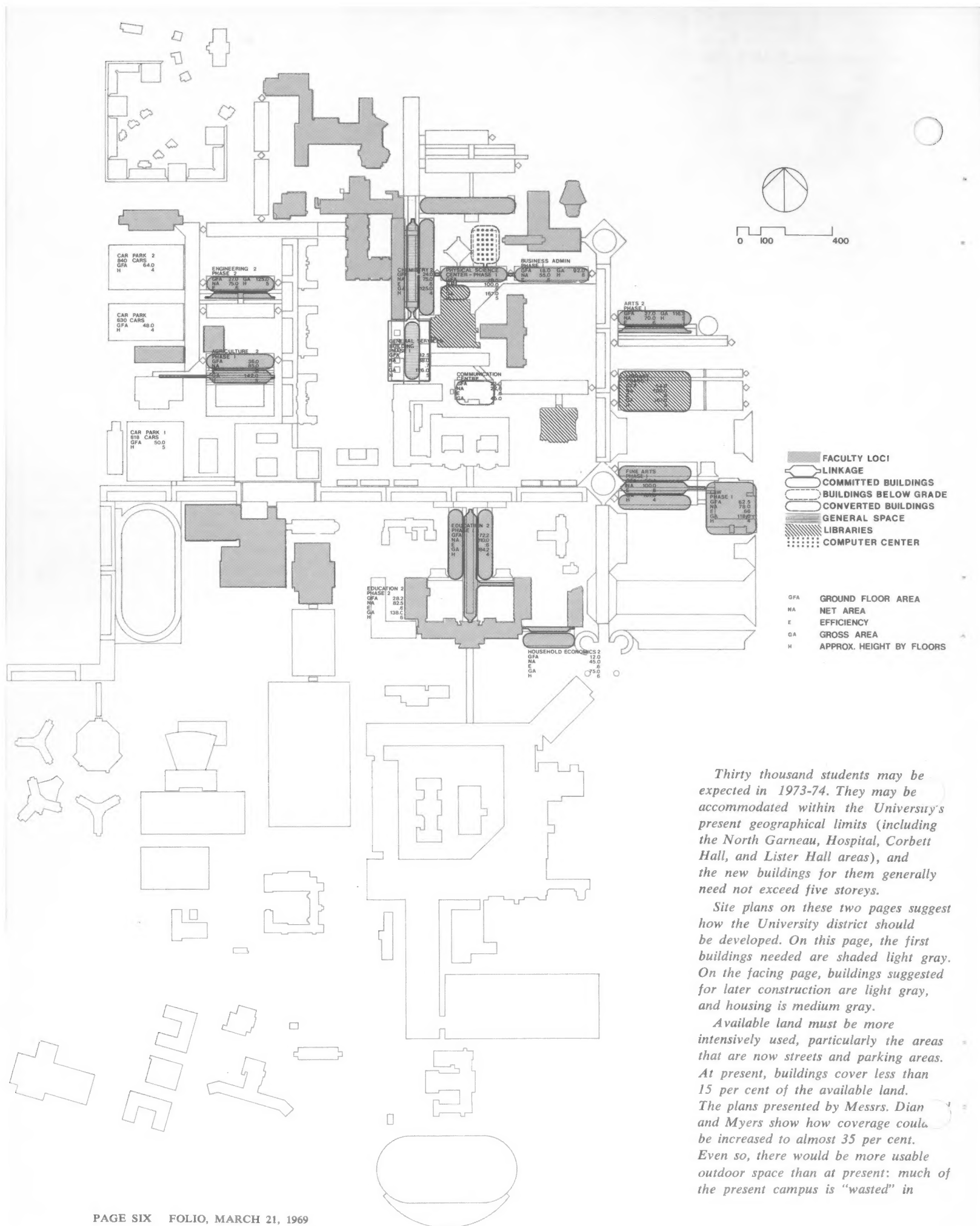
To construct deep tunnel combined sanitary and storm sewers to serve eventually all areas of the campus.

To incorporate service tunnels where appropriate in the basements of new buildings.

To locate service tunnels below the pedestrian street system where possible.

To evaluate alternative forms of information, retrieval, information dissemination, catalogue, and collection systems.

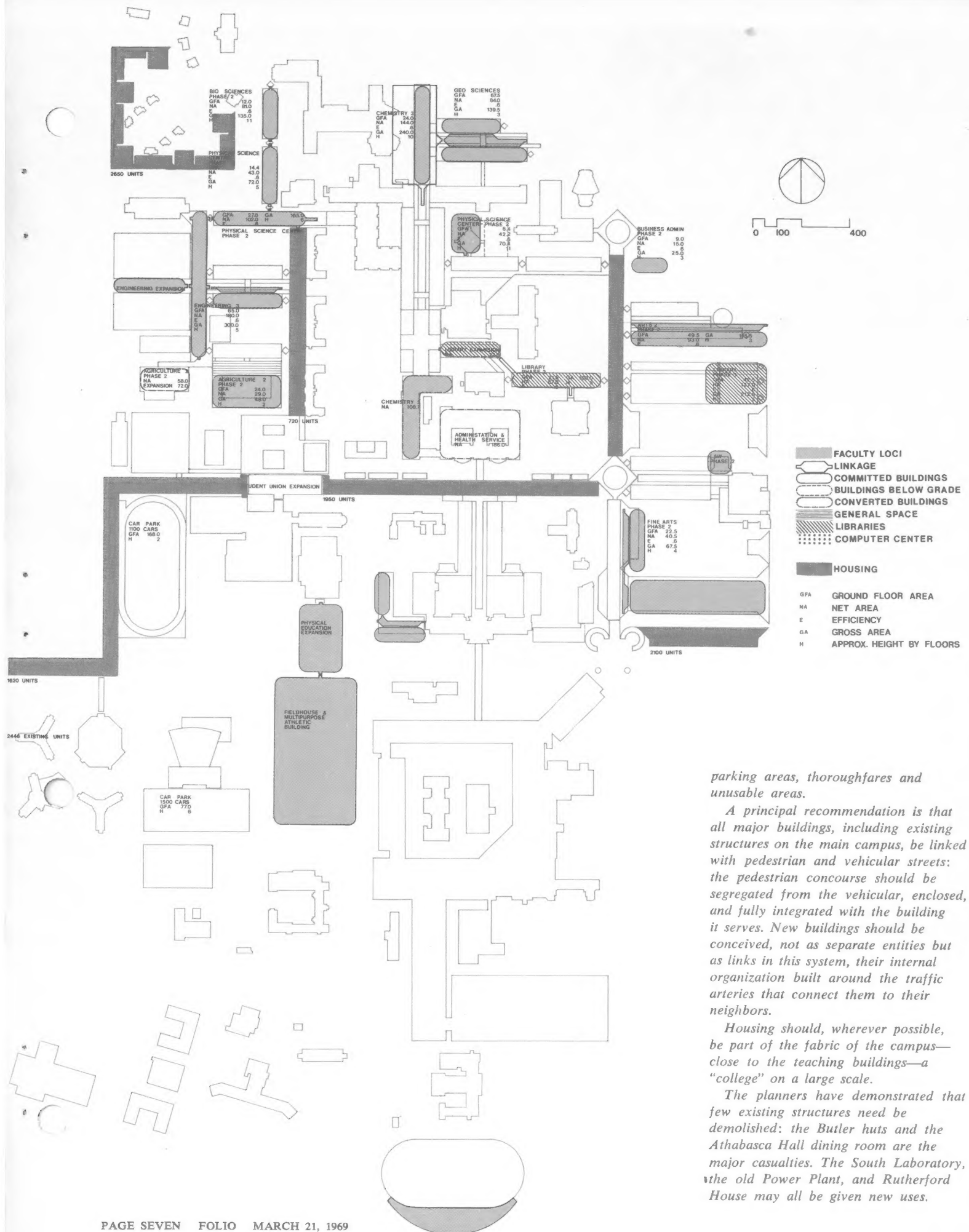
To accommodate commercial-type facilities on the pedestrian street system where possible.



Thirty thousand students may be expected in 1973-74. They may be accommodated within the University's present geographical limits (including the North Garneau, Hospital, Corbett Hall, and Lister Hall areas), and the new buildings for them generally need not exceed five storeys.

Site plans on these two pages suggest how the University district should be developed. On this page, the first buildings needed are shaded light gray. On the facing page, buildings suggested for later construction are light gray, and housing is medium gray.

Available land must be more intensively used, particularly the areas that are now streets and parking areas. At present, buildings cover less than 15 per cent of the available land. The plans presented by Messrs. Dian and Myers show how coverage could be increased to almost 35 per cent. Even so, there would be more usable outdoor space than at present: much of the present campus is "wasted" in



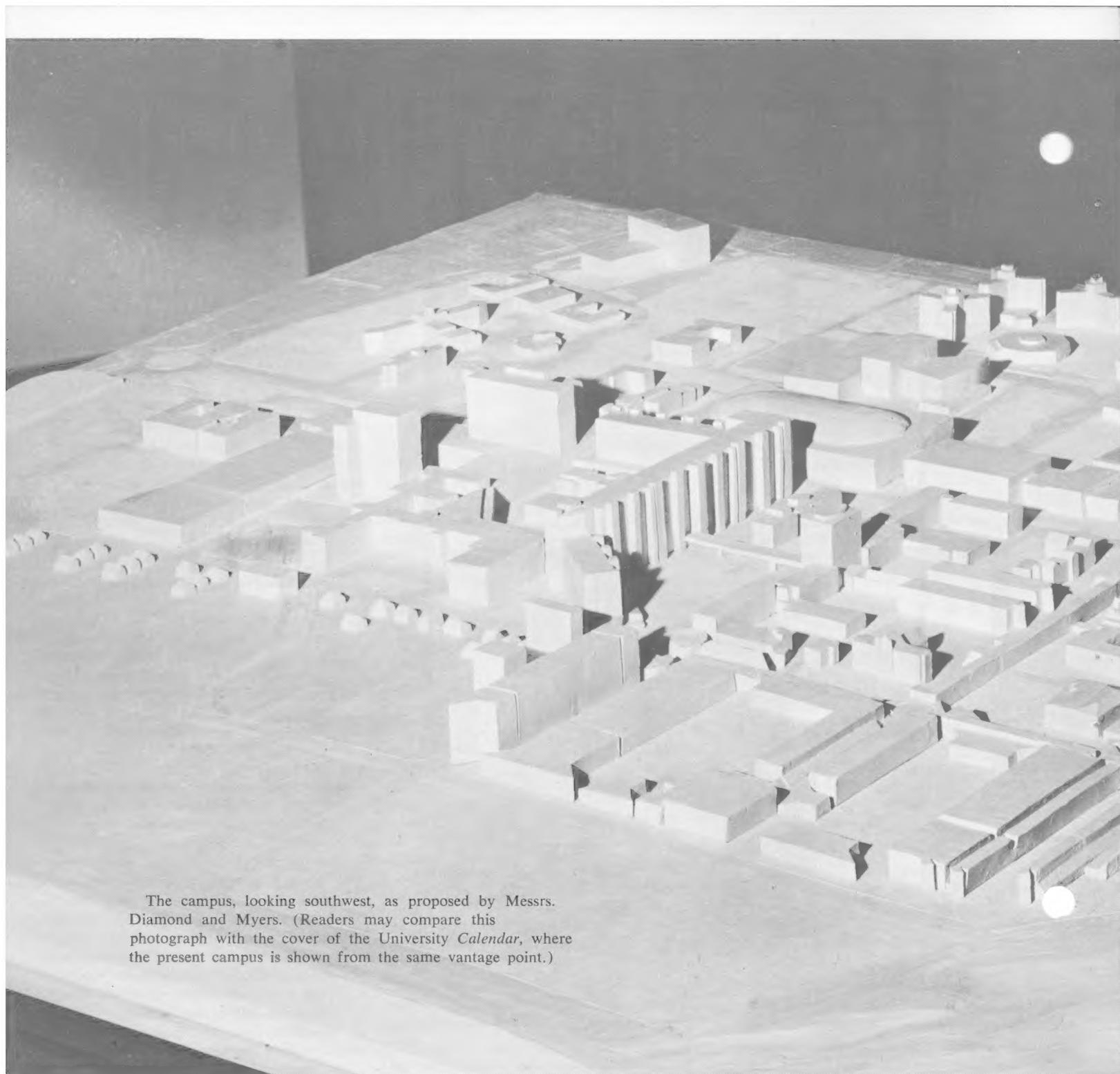
parking areas, thoroughfares and unusable areas.

A principal recommendation is that all major buildings, including existing structures on the main campus, be linked with pedestrian and vehicular streets: the pedestrian concourse should be segregated from the vehicular, enclosed, and fully integrated with the building it serves. New buildings should be conceived, not as separate entities but as links in this system, their internal organization built around the traffic arteries that connect them to their neighbors.

Housing should, wherever possible, be part of the fabric of the campus—close to the teaching buildings—a “college” on a large scale.

The planners have demonstrated that few existing structures need be demolished: the Butler huts and the Athabasca Hall dining room are the major casualties. The South Laboratory, the old Power Plant, and Rutherford House may all be given new uses.





The campus, looking southwest, as proposed by Messrs. Diamond and Myers. (Readers may compare this photograph with the cover of the *University Calendar*, where the present campus is shown from the same vantage point.)

# FOLIO

THE UNIVERSITY OF ALBERTA  
EDMONTON 7, ALBERTA



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